



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,700	01/19/2005	Ingrid Maja Guenther	TS8579US	2160
7590	08/22/2008		EXAMINER	
Jennifer D Adamson Shell Oil Company Intellectual Property Dept. Po Box 2463 Houston, TX 77252-2463				SEIFU, LESSANEWORK T
ART UNIT		PAPER NUMBER		
1797				
		MAIL DATE		DELIVERY MODE
		08/22/2008		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/521,700	GUENTHER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lessanework T. Seifu	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 May 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-11 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuest et al. (WO 00/12935) in view of Chu et al. (US 4,471,145) and O'Rear (US 6,392,108).

**Note:** The reference Wuest et al. (US 6,540,505) is used below as the US equivalent of Wuest et al. (WO 00/12935).

Regarding claims 1 and 11, Wuest et al. disclose a process to generate heat comprising burning a liquid fuel in a vaporizing burner, which is construed as applicants' evaporator burner oven, for heating systems in residential and non-residential buildings (see col. 4, line 32 to col. 5, line 24). Wuest et al. disclose that the burner is equipped with an ionization measuring device for flame detection (see col. 3, lines 15-25). Wuest et al. further disclose that the burner is suitable for burning extra light heating oil (see col. 2, lines 18-25). The reference however does not explicitly disclose a liquid fuel comprising a Fischer-Tropsch derived fuel. Chu et al. disclose a process for the conversion of syngas to liquid hydrocarbons in a Fischer-Tropsch process. Chu et al further disclose that the hydrocarbon mixtures derived from the Fischer-Tropsch process are useful in the manufacture of heating oil (see col. 1, lines 48-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used heating oil derived from Fischer-Tropsch process in Wuest et al. or in any other evaporator burner ovens capable of burning heating oil to generate heat, such as those described in applicants' background section (see specification, page 1, lines 4 to 9), as the liquid fuel to generate heat. Because O'Rear discloses that Fischer-Tropsch derived fuels have very low levels of sulfur and nitrogen,

have excellent burning properties, and can be used as an environmentally friendly “green fuel” (see col. 6, lines 54-67 and col. 13, lines 18-20).

5. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuest et al. (WO 00/12935) in view of Chu et al. (US 4,471,145) and O'Rear (US 6,392,108) as applied to claim 1 above, and further in view of Cosyns et al. (US 4,133,841).

Regarding claims 2-7, Wuest et al, Chu et al. and O'Rear combined teach all of the limitations in claim 1 above. O'Rear further discloses a hydrocarbonaceous product, which the reference defined as any hydrocarbonaceous product including both petroleum-derived hydrocarbonaceous product and Fischer-Tropsch products, with additives (see col. 2, lines 15-25 and col. 4, lines 64-66). O'Rear discloses that the products from the Fischer-Tropsch process can further be processed using known processes to meet end use specifications (see col. 11, lines 1-25). O'Rear further discloses that Fischer-Tropsch derived fuels have excellent burning properties and have paraffin components > 50% and can exceed 70% and even 95%. O'Rear discloses that Fischer-Tropsch distillate fuels typically contain less than 1% ppm by weight of sulfur and generally do not contain aromatic compounds (see col. 6, lines 54-67). O'Rear discloses the products of Fischer-Tropsch process include hydrocarbons boiling below 700° F (371° C) (see col. 11, lines 1-25).

Cosyns et al. disclose process for upgrading effluents from Fischer-Tropsch syntheses process to produce liquid fuels which are mainly gasoline, kerosene and gasoil cuts. Cosyns et al. teach that the liquid fuels from processes such as Fischer-

Tropsch syntheses have the same use as oil (from oil fields, implied) and its derivatives (see col. 1, lines 5-45). Cosyns et al. further disclose Fischer-Tropsch derived products having density between 0.695 and 0.86 g/cm<sup>3</sup> at 15° C, and products comprising kerosene cuts (200 – 250° C) and gas oil cuts (250 – 360° C) (see for example col. 14, lines 1-60 and col. 15, lines 50-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a liquid fuel derived from a Fischer-Tropsch process, meeting a specification of a heating oil or extra light heating oil, according to the teachings of O'Rear or Chu et al. or Cosyns et al. and generate heat by burning the liquid fuel as taught in Wuest et al, because O'Rear discloses that Fischer-Tropsch derived fuels have very low levels of sulfur and nitrogen, have excellent burning properties, and can be used as an environmentally friendly "green fuel" (see col. 6, lines 54-67 and col. 13, lines 18-20).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wuest et al. (WO 00/12935) in view of Chu et al. (US 4,471,145), O'Rear (US 6,392,108) and Cosyns et al. (US 4,133,841) as applied to claim 7 above, and further in view of Brown et al. (US 3,607,074).

Regarding claim 8, as shown above, Wuest et al in view of Chu et al, O'Rear and Cosyns et al. meet the limitation of claim 7. The above references however do not disclose an odor marker for a liquid fuel. Brown et al. discloses an odor marker for liquid fuels (see col. 1, lines 22-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the liquid fuel of Chu et al.

or O'Rear or Cosyns et al. to include odor marker according to the teaching of Brown et al. because Brown et al. teach that odor marker is a reliable and inexpensive method for identifying liquid fuels.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuest et al. (WO 00/12935) in view of Chu et al. (US 4,471,145), O'Rear (US 6,392,108) and Cosyns et al. (US 4,133,841) as applied to claim 7 above, and further in view of Thrasher et al. (US 4,932,979).

Regarding claims 9 and 10, as shown above, Wuest et al in view of Chu et al, O'Rear and Cosyns et al. meet the limitation of claim 7. The above references however do not disclose a color marker for a liquid fuel nor an additive as a flame colorant. Thrasher et al. disclose a liquid fuel, wherein low concentrations of additives are utilized to impart color to the liquid fuel and to make the liquid fuel flame colorant (see Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the liquid fuel of Chu et al. or O'Rear or Cosyns et al. to include color marker according to the teaching of Thrasher et al. because Thrasher et al. teach that it is advantageous to color a colorless fuel and flame for identification purposes and safety (see col. 1, lines 40-60).

### ***Response to Arguments***

8. Applicant's arguments filed on May 12, 2008 have been fully considered but they are not persuasive.

9. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's argument that the prior art of record does not teach or describe how to operate an evaporator burner oven is irrelevant to the claim rejections under 35 U.S.C. § 103 (a) set forth in this and the previous Office Action dated November 9, 2007. Applicant's claimed invention and the 103 (a) rejection in this and the previous Office Action are directed to a process to generate heat comprising burning a liquid fuel comprising a Fischer-Tropsch derived fuel in an evaporator burner oven. The process of how to operate an evaporator burner is irrelevant to applicants' claimed invention of a process to generate heat in an evaporator burner oven by selecting a particular fuel for evaporator burner ovens.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lessanework T. Seifu whose telephone number is (571)270-3153. The examiner can normally be reached on Mon-Thr 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS  
/Walter D. Griffin/  
Supervisory Patent Examiner, Art Unit 1797